U.S. Serial No. 09/889,820 Group Art Unit: 1614

#### **REMARKS**

Claims 1-13 are pending in this application. Claims 2-11 and 13 are withdrawn from consideration and claims 1 and 12 are rejected. In response, Applicants have canceled claims 2-11 and 13. Applicants have also amended the title of the application so that it better reflects the content of the application. Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached pages are captioned:

# "Amendments made to the Specification" and "Amendments to the Claims".

Applicants' response to the Examiner's rejection is as follows.

#### I. Restriction Requirement Under 35 U.S.C. §121 and 372

The Examiner has required a restriction of the claims to one of the following categories:

- Group I. Claims 1 and 12, drawn to compositions and use.
- Group II. Claims 2-8, 10 and 13, drawn to compounds and composition.
- Group III. Claim 9, drawn to multiple processes of preparing.

Claim 11 is drawn to nonstatutory subject matter and hence cannot be grouped. In Applicants' response dated December 2, 2002, Applicants elected, with traverse, to prosecute the invention of Group I, drawn to claims 1 and 12. Applicants also elected, with traverse, the single species [3R, 4R]-1-Heptyl-3-(carboxymethyl)-4-[3-(6-methoxyquinolin-4-yl) propyl] piperidine, given in example 6, page 29 of the specification. Since the requirement for restriction has been made final, Applicants have cancelled non-elected claims 2-11 and 13. However, Applicants reserve the right to file divisional applications on the non-elected subject matter.

#### II. Allowable Subject Matter

Applicants acknowledge that the Examiner found the elected species allowable.

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## III. Rejection Under 35 U.S.C. §102(a)

Claim 12 is rejected under 35 U.S.C. §102(a) as being anticipated by Renault et al, (FR 2560873 A1). The Examiner states that claim 12 is anticipated by the compound disclosed in Renault, 1-[2-(1,1-dimethylethyl)-4-quinazolinyl]-3-(4-piperidinyl)-1-propanone, and its formulation into compositions. Applicants respectfully traverse this rejection.

Applicants submit that the Renault does not anticipate claim 12 of the instant application. All of Applicants compounds must have a substituent attached to the nitrogen of the piperidine ring. All of the compounds made in Renault are unsubstituted in this position. Furthermore, claim 12 relates to a method of treating bacterial infections. Renault does not disclose a method of treating bacterial infections. Given the above arguments, Renault clearly does not anticipate Applicants' invention. Therefore, it is requested that the rejection of claim 12 under 35 U.S.C. §102(a) be reconsidered and withdrawn.

## IV. Rejection Under 35 U.S.C. §103

Claim 1 is rejected under 35 U.S.C. §103(a) as being unpatentable over Renault et al. (FR 2560873 A1). The Examiner states the instant invention differs from the cited reference in that the references does not teach the instant piperidine derivatives are used to treat bacterial infections. The Examiner further states that one skilled in the art would have assumed the instant piperidine derivatives would be effective against bacterial infections since the derivatives or compounds possess therapeutic uses. Applicants respectfully traverse this rejection.

Applicants submit that the threshold consideration when analyzing whether claimed compounds would have been obvious in view of reference compounds is a comparison of their structural similarity. When the closest reference compound must be modified in two or more essential ways to arrive at the claimed compounds, the reference fails to establish prima facie obviousness. In re Taborsky, 183 U.S.P.Q. 50, 55 (C.C.P.A. 1974). Thus, the need to modify the closest reference compound by changing a halo substituent from chloro to fluoro and the need to move an aromatic nitro group from the five position to the three position is enough to prevent a finding of prima facie obviousness. Id. Moreover, a prima facie obviousness case is not sustainable unless the relied-upon reference provides some suggestion for making the changes required to go from the reference compounds to the claimed compounds. Id.

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Shown in Table I, below, are the structural formulae for Applicants' compounds and Renault's compounds.

## Table I

$$\frac{\text{Genus}}{\text{A-B-(CH}_2)_n} \frac{\text{Species}}{\frac{1}{3}}$$

$$\frac{A^{-B} \cdot (CH_2)_n}{\frac{1}{2}} \frac{1}{\sqrt{2}} \frac{$$

In a comparison of the structures of these compounds, Applicants submit that there are at least two essential modifications of the closest reference compound to arrive at the claimed compounds. Renault must be modified by (i) removing the t-butyl group from the quinazolinyl ring (ii) changing the ketone linker to an ether (iii) adding a carboxylic acid to the piperidine ring and (iv) adding an alkyl group to the piperidine ring. Renault does not suggest any of these additions or modifications. Thus, Renault fails to provide the requisite motivation to make the above structural changes.

Furthermore, Applicants' compounds are used to treat bacterial infections. Renault does not suggest that its compounds would be useful in treating any disease other than cardiac arrhythmia. Without some suggestion or teaching from Renault, it would not have been obvious to one of ordinary skill in the art to use any piperidine derivative as an antibiotic.

The evidence presented above shows that the Renault reference does not give one of ordinary skill the motivation to make the structural modifications needed to arrive at the instantly claimed compounds nor does it suggest these modified compounds would be useful in treating bacterial infections. In light of the arguments given above, reconsideration and withdrawal of

the rejection of claims under 35 U.S.C. §103 in view of Renault et al. is respectfully requested.

## V. Conclusion

This reply is intended to distinctly and specifically point out presumed errors in the Examiner's Action, to respond to every ground of objection and rejection, and to advance this case to allowance.

In view of the above amendments and remarks, reconsideration of this application is requested. Should the Examiner have any questions or wish to discuss any aspect of this case, the Examiner is encouraged to call the undersigned agent at the number below.

Respectfully submitted,

pelladder.

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